

01/07/00
jc586 U.S. PTO

1-10-06

A

CERTIFICATE OF MAILING BY EXPRESS MAIL

The undersigned hereby certifies that he or she is personally depositing this paper, and any other paper or fee referred to in this document as being enclosed, with the United States Postal Service "Express Mail Post Office to Addressee" service on **January 7, 2000**, in an envelope addressed to Asst. Commissioner for Patents, BOX PATENT APPLICATION, Washington, D.C. 20231.

SONJI SHIVERS

(name of person mailing paper or fee)

Sonji Shivers

(signature of person mailing paper or fee)

EXPRESS MAIL NO.: EM425816952US Attorney Docket No. 12640US01

jc511 U.S. PTO
09/480724
01/07/00

McAndrews, Held & Malloy, Ltd.
34th Floor
500 West Madison Street
Chicago, Illinois 60661
(312) 707-8889

January 7, 2000

ASST. COMMISSIONER FOR PATENTS
BOX PATENT APPLICATION
Washington, D.C. 20231

Sir:

Transmitted herewith for filing is the patent application of Inventor:

Robert Carey and Greg McIntyre

For: **METHOD OF SELECTING SECURITIES FOR A PORTFOLIO**

1. Enclosed are:

10 sheets of specification including 3 sheets of claims, 1 sheet of abstract and 1 sheets of informal drawing.

Declaration and Power of Attorney (unsigned).

002070-42204450

One (1) return postcard.

2. The following arrangements have been made to pay the filing fee:

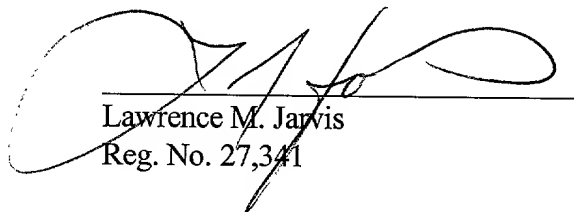
☒ No fee is authorized at this time.

3. Please address all telephone calls to:

Lawrence M. Jarvis at telephone No. (312) 775-8000.

4. Please address all correspondence to:

McAndrews, Held & Malloy, Ltd.
34th Floor
500 West Madison Street
Chicago, Illinois 60661


Lawrence M. Jarvis
Reg. No. 27,341

TITLE OF THE INVENTION

Method of Selecting Securities for a Portfolio

5

BACKGROUND OF THE INVENTION

The present invention generally relates to a method for selecting a securities portfolio for investment. More particularly, the present invention relates to an investment strategy for selecting a securities portfolio based upon three criteria: price appreciation, return on assets ratio, and price-to-cashflow ratio. The investment objective of the method of the present invention is to provide an above-average total return from the portfolio. The method of the present invention seeks to meet this objective through capital appreciation.

15 A unit investment trust (UIT) is a professionally selected, diversified portfolio of stocks, bonds, or other securities that remains as a fixed portfolio throughout the life of the trust. Investors in a UIT purchase units, which represent an undivided ownership in the entire portfolio. Unlike mutual funds, in which the portfolio is actively managed and traded and continuously changes, UITs generally remain fixed for a predetermined period of time. Portfolios are designed to fill a variety of investment needs and risk tolerance levels. They fall into primarily two categories, equity and fixed income.

Equity portfolios are typically classified as either strategies or sectors. Strategy portfolios follow predetermined investment criteria for selecting the stocks for the portfolio. All strategies have three inherent qualities:

1. Simplicity: The strategies seek to out-perform specified indices by selecting portfolios using sound, fundamental screens that reflect the historical behavior of the securities.

2. Resilience: The strategies must show back-tested results and have staying power even through bear markets.

3. Discipline: The strategies dictate which stocks are chosen for the portfolio; no emotional judgments are made and the strategies always remain the same.

Heretofore, investment strategies have been illustrated in U.S. Patent No.

5,978,778 issued to O'Shaughnessy on November 2, 1999 and U.S. Patent No. 5,132,899 issued to Fox on July 21, 1992. However, these investment strategies are not the same as the method of the present invention.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a novel security selection investment strategy. It is also an object of the present invention to automate the investment strategy of the present invention.

These and other objects of the present invention are accomplished in a security selection method that seeks to outperform a typical index by adhering to a disciplined investment process. The first step in this strategy is defining the universe of securities for potential investment. In one embodiment of the present invention, the method begins with using a database of stocks of companies listed in the Nasdaq 100 Index, which

represents the largest non-financial domestic companies listed on the Nasdaq Stock Market's National Market. However, the present invention is not intended to be limited to just the Nasdaq 100 Index, or even to stocks; any type of security meeting the selection criteria may be utilized. Moreover, the present invention is not limited to any particular
5 database of securities; any group of securities, including one developed by the user of the present method, could be substituted for the Nasdaq 100 Index of stocks.

The present method then selects securities from the group of securities based upon three criteria: price appreciation, return on assets ratio, and price-to-cashflow ratio. The first step involves screening for consistent growth by looking at the securities' price
10 appreciation. Securities may be evaluated by determining their statistical rates of price appreciation over various periods of time. A variety of statistical analyses, including least squares regression analysis, may be applied in evaluating the price history of each security. In one exemplary embodiment of the present invention, least squares regression analysis is performed to determine a statistical rate of appreciation of each security over
15 both six-month and one-year periods. These securities may then be ranked by both these six-month and one-year statistical rates of appreciation.

The second step of the present method focuses on profitability. Securities are screened for profitability by ranking the securities in the group based on their return on assets. Return on assets is computed by dividing net income by total assets.

20 Lastly, the securities are screened for value by ranking them based on their price-to-cashflow ratios. Cashflow is computed by adding income (before extraordinary items)

to depreciation and amortization. The price-to-cashflow ratio is computed by dividing the market value of the security by total cashflow.

These and other features of the present invention are discussed or are apparent in the following detailed description of the preferred embodiments of the invention.

5

BRIEF DESCRIPTION OF THE DRAWINGS

The Figure is a schematic flow chart depicting the steps in an exemplary method of selection of securities.

10

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

Referring to the Figure, a stock database 11 is formed by input of data using a conventional personal computer (not shown). The data input includes the names of, or a representation of, the one hundred (100) stocks that make up the Nasdaq 100 index. The names of the 100 stocks, or their symbols or other representative indicia, are stored in the database 11.

In addition to the identity of the 100 stocks, other data related to each stock may also be stored in the database 11 in association with its respective stock name. Such information may include (1) the price appreciation, (2) the return-on-assets ratio, and (3) the price-to-cashflow ratio.

In the step indicated by the diagram block 13, the stocks in the database 11 are sorted, or organized, according to the magnitude of the stock's one-year price appreciation value ("PAV"). Least squares regression analysis of the monthly price

history of each security over the preceding 12 months is performed in computing the one-year PAV. The sorting may be done by organizing the stocks in descending order of the one-year PAV. The sorted stock names are written to File A, as shown in the diagram block 15.

5 As understood, the only items of information necessary to create File A are the 100 stock names (or representations of the 100 stocks) and the one-year PAV for each stock. That information may be initially stored in database 11.

10 In addition, the step indicated by diagram block 17 is performed in which the stocks are sorted, or organized, according to the magnitude of the stock's six-month price appreciation value ("PAV"). Least squares regression analysis of the monthly price history of each security over the preceding 6 months is performed in computing the six-month PAV. The sorting may be done by organizing the stocks in descending order of the six-month PAV. The sorted stock names are written to File B, as shown in diagram block 19. The six-month stock price appreciation information may be initially stored in 15 the database 11 such that stocks from that database are sorted (diagram block 17) and written to File B (diagram block 19). Alternatively, the stocks in File A could be associated with a six-month PAV such that they could be sorted (diagram block 17) and written to File B (diagram block 19).

20 The step indicated by diagram block 21 is performed in which the stocks are sorted, or organized, according to the magnitude of the company's return-on-assets ratio, computed by dividing net income by total assets. The sorting may be done by organizing the stocks in descending order of return-on-assets ratio. The sorted stock names are

written to File C, as shown in diagram block 23. The return-on-assets ratio information may be initially stored in the database 11 such that stocks from that database are sorted (diagram block 21) and written to File C (diagram block 23). Alternatively, the stocks in Files A or B could be associated with a return-on-assets ratio such that they could be
5 sorted (diagram block 21) and written to File C (diagram block 23).

The step indicated by diagram block 25 is performed in which the stocks are sorted, or organized, according to the magnitude of the company's price-to-cashflow ratio, computed by dividing the market value of the stock by total cashflow. The sorting may be done by organizing the stocks in ascending order of price-to-cashflow ratio. The
10 sorted stock names are written to File D, as shown in diagram block 27. The price-to-cashflow ratio information may be initially stored in database 11 such that stocks from that database are sorted (diagram block 25) and written to File D (diagram block 27). Alternatively, the stocks in Files A, B, or C could be associated with a price-to-cashflow ratio such that they could be sorted (diagram block 25) and written to File D (diagram
15 block 27).

After File D has been completed, the step indicated by diagram block 29 is performed in which the stocks are sorted, or organized, according to the magnitude of the company's average rank on the four lists in Files A, B, C, and D. (For example, a stock that happened to be ranked first in Files A and B, i.e., happened to have the greatest one-
20 year and six-month PAVs, and was ranked second in Files C and D, i.e., had the second highest return-on-assets ratio and the second lowest price-to-cashflow ratio, would have an average rank of $(1+1+2+2)/4$ or 1.5.) The sorting may be done by organizing the

stocks in descending order of their average rank. (A stock with an average rank of 1.5 would be listed ahead of a stock with an average rank of 2.0, etc.) The sorted stock names are written to File E, as shown in diagram block 31.

After File E has been completed, the step indicated by diagram block 33 is performed in which a desired number (for example, fifteen) of stocks from File E with the greatest average rank on the four lists in Files A, B, C, and D are selected. Since the stocks are sorted in File E in descending order of their average rank, this selection is performed by identifying the first 15 stocks in the ordered list. As will suggest itself, other modes of selection may be used.

The identities of those 15 stocks are stored in File F, as shown at diagram block 35. As understood, File F may be a file different from File E, or non-selected stocks in File E may be deleted to form File F.

In an exemplary embodiment, a portfolio of the top 15 stocks of File F will represent one series of a unit investment trust. With the deposit of the selected shares of stock, a percentage relationship among the securities in the trust's portfolio is established. In an exemplary embodiment, the selected securities are weighted by market capitalization subject to the restriction that no stock will comprise less than 1% or more than 25% of the portfolio on the business day prior to the initial date of deposit of said trust.

The trust will terminate on a mandatory termination date, which will typically be approximately 13 months from the initial date of deposit. Twelve-month termination

dates are also contemplated. However, the duration of the investment vehicle is not limited to any particular length of time.

Some possible features and benefits of such a unit investment trust or other pooled vehicle or investment account can be summarized as follows (although these are not essential features of the present invention):

- Known Portfolio

The present method produces a specific portfolio giving investors the comfort of knowing what they own.

- Diversification

Portfolios produced by the present method can be diversified across many different securities, offering a portfolio for almost every asset allocation need.

- Low Expenses

Portfolios selected pursuant to the present method offer significantly lower expenses than other packaged products.

- Daily Liquidity

Units may be redeemed on any business day at the redemption price, which may be more or less than the original purchase price. There is no cost to liquidate.

- Professional Portfolio Selection and Supervision

Once the portfolio is chosen, the holdings of the portfolio are supervised, eliminating the need of individual investors to oversee each security.

- Fully Invested in the Market

5 Portfolios selected pursuant to the present method have limited cash positions so more of the investor's money is working in the market.

- Ease of Ownership

10 With one low minimum purchase, investors can own a diversified portfolio of securities without making a substantial commitment of time or capital.

The method of the present invention is not limited to the selection of securities for funding a unit investment trust. Securities may be selected for funding any type of pooled investment vehicle or investment account. The present invention could also be used in connection with variable annuities, open-ended mutual funds, etc.

15 Utilizing the Nasdaq 100 Index, under present market conditions the selected portfolio would tend to be concentrated in technology stocks. Technology companies are generally subject to the risks of rapidly changing technologies; short product life cycles; fierce competition; aggressive pricing; frequent introduction of new or enhanced products; the loss of patent, copyright and trademark protections; and government
20 regulation. Technology companies may be smaller and less experienced companies, with limited product lines, markets or financial resources. Technology company stocks have

experienced extreme price and volume fluctuations that are often unrelated to their operating performance.

In an exemplary embodiment, the following Table would illustrate one possible selected portfolio:

5

TABLE

| Number of Shares | Issuer of Security | % of Aggregate Offering Price | Market Value per Share (\$) | Cost of Securities to Trust (\$) | Market Capitalization (in million \$) |
|------------------|-----------------------|-------------------------------|-----------------------------|----------------------------------|---------------------------------------|
| 62 | Adobe Systems | 2.78 | 66.500 | 4123 | 7993 |
| 262 | Amgen | 13.83 | 78.375 | 20534 | 39971 |
| 84 | Apple Computer | 4.41 | 77.875 | 6542 | 12529 |
| 51 | Atmel Corp. | 1.25 | 36.438 | 1858 | 3652 |
| 77 | Biogen | 3.64 | 70.188 | 5405 | 10550 |
| 50 | CMGI | 3.53 | 104.875 | 5244 | 9996 |
| 37 | Comverse Technology | 2.70 | 108.250 | 4005 | 7716 |
| 26 | Microchip Technology | 1.07 | 61.313 | 1594 | 3118 |
| 743 | Oracle | 22.96 | 45.875 | 34085 | 65311 |
| 46 | Siebel Systems | 3.11 | 100.313 | 4614 | 9290 |
| 376 | Sun Microsystems | 24.98 | 98.625 | 37083 | 76982 |
| 200 | Telllabs | 8.22 | 61.000 | 12200 | 23929 |
| 35 | VISX | 1.58 | 67.250 | 2354 | 4288 |
| 74 | Vitesse Semiconductor | 20.6 | 41.375 | 3062 | 6350 |
| 79 | Xilinx | 3.88 | 72.875 | 5757 | 11518 |

While particular elements, embodiments and applications of the present invention have been shown and described, it is understood that the invention is not limited thereto since modifications may be made by those skilled in the art, particularly in light of the foregoing teaching. It is therefore contemplated by the appended claims to cover such modifications and incorporate those features which come within the spirit and scope of the invention.

10

CLAIMS:

1. A method for selecting securities from a group of securities for an investment portfolio comprising:

5 assigning a first numerical rank to each security in a group of securities according to an evaluation of its price appreciation over a first predetermined period, with the highest rank being assigned to the security with the price appreciation evaluated as the best;

10 assigning a second numerical rank to each security in said group of securities according to its return-on-assets ratio, with the highest rank being assigned to the security with the greatest return-on-assets ratio;

assigning a third numerical rank to each security in said group of securities according to its price-to-cashflow ratio, with the highest rank being assigned to the security with the smallest price-to-cashflow ratio; and

15 calculating an average numerical rank that is the average of the first, second, and third numerical ranks for each security in said group of securities;

selecting a desired number of securities having the highest average numerical ranks from said group of securities, forming a group of selected securities.

2. The method of claim 1 wherein said group of securities consists of the 100
20 stocks that make up the Nasdaq 100 Index.

3. The method of claim 1 wherein said evaluation of price appreciation is accomplished through least squares regression analysis of the periodic price history of each security over at least three periods.

4. The method of claim 1 wherein the desired number of securities having the highest average numerical ranks from said group of securities is 15 securities.

5. The method of claim 1 wherein said method further includes purchasing said group of selected securities.

5 6. The method of claim 5 wherein said method further includes creating a unit investment trust comprising said purchased securities.

7. The method of claim 6 wherein said purchased securities comprising said unit investment trust are weighted by market capitalization.

8. The method of claim 6 wherein said unit investment trust is subject to the
10 restriction that none of said selected securities will comprise less than one percent of said portfolio as of the initial date of deposit of said unit investment trust.

9. The method of claim 6 wherein said unit investment trust is subject to the restriction that none of said selected securities will comprise more than 25 percent of said portfolio as of the initial date of deposit of said unit investment trust.

10 10. The method of claim 6 wherein said unit investment trust has a life of 13 months.

11. A computer programmed to carry out the steps of claim 1.

12. A computer-readable medium having imprinted therein a computer program containing instruction steps such that upon installation of said computer
20 program in a general purpose computer, the computer is capable of performing the method of claim 1.

13. The method of claim 1, further comprising the steps of assigning a fourth numerical rank to each security in said group of securities according to an evaluation of its price appreciation over a second predetermined period different from said first predetermined period, with the highest rank being assigned to the security with the price appreciation evaluated as the best, wherein, during said calculating step, said average numerical rank is the average of the first, second, third, and fourth numerical ranks for each security in said group of securities.

14. The method of claim 13, wherein said evaluation of price appreciation for said first numerical rank is accomplished through least squares regression analysis of the monthly price history of each security over the preceding twelve months.

15. The method of claim 13, wherein said evaluation of price appreciation for said fourth numerical rank is accomplished through least squares regression analysis of the monthly price history of each security over the preceding six months.

16. The method of claim 15, wherein said evaluation of price appreciation for said first numerical rank is accomplished through least squares regression analysis of the monthly price history of each security over the preceding twelve months.

17. The method of claim 1 wherein said method further includes creating any pooled investment vehicle comprising said purchased securities.

18. The method of claim 1 wherein said method further includes creating a variable annuity comprising said purchased securities.

19. The method of claim 1 wherein said method further includes creating an investment account comprising said purchased securities.

ABSTRACT OF THE DISCLOSURE

A method is provided for selecting a portfolio of securities for investment purposes. Specifically, the method utilizes three types of securities-related data: price appreciation, return-on-assets ratio, and price-to-cashflow ratio. A group of securities is ranked by price appreciation, return-on-assets ratio, and price-to-cashflow ratio; a number of the securities having the highest average rank are selected for investment.

Figure

DECLARATION AND POWER OF ATTORNEY

(Case No. 12640US01)

As the below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe I am one of the original and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD OF SELECTING SECURITIES FOR A PORTFOLIO

the specification of which:

 X is attached hereto.

 was filed on , as United States Application Serial Number .

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed. **NONE**

I hereby claim the benefit under Title 35, United States Code, 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, 1.56 which occurred between the filing date of the prior application and the national or PCT international filing date of this application. **NONE**

And I hereby appoint:

| | |
|---------------------|-----------------|
| George P. McAndrews | Reg. No. 22,760 |
| John J. Held | Reg. No. 21,061 |
| Timothy J. Malloy | Reg. No. 25,600 |
| William M. Wesley | Reg. No. 26,521 |
| Lawrence M. Jarvis | Reg. No. 27,341 |
| Gregory J. Vogler | Reg. No. 31,313 |
| Jean Dudek Kuelper | Reg. No. 30,171 |
| Herbert D. Hart III | Reg. No. 30,063 |

002070-42202460

| | |
|---------------------------|-----------------|
| Robert W. Fieseler | Reg. No. 31,826 |
| D. David Hill | Reg. No. 35,543 |
| Thomas J. Wimbiscus | Reg. No. 36,059 |
| Steven J. Hampton | Reg. No. 33,707 |
| Priscilla F. Gallagher | Reg. No. 32,223 |
| Stephen F. Sherry | Reg. No. 30,590 |
| Patrick J. Arnold Jr. | Reg. No. 37,769 |
| George Wheeler | Reg. No. 28,766 |
| Janet M. McNicholas | Reg. No. 32,918 |
| Ronald E. Larson | Reg. No. 24,478 |
| Christopher C. Winslade | Reg. No. 36,308 |
| Edward A. Mas II | Reg. No. 37,179 |
| Gregory C. Schodde | Reg. No. 36,668 |
| Edward W. Remus | Reg. No. 25,703 |
| Donald J. Pochopien | Reg. No. 32,167 |
| Sharon A. Hwang | Reg. No. 39,717 |
| David D. Headrick | Reg. No. 40,642 |
| Dean D. Small | Reg. No. 34,730 |
| Alejandro Menchaca | Reg. No. 34,389 |
| Kirk A. Vander Leest | Reg. No. 34,036 |
| Richard T. McCaulley, Jr. | Reg. No. 41,977 |
| Paul L. Rodriguez | Reg. No. 40,788 |
| Anthony E. Dowell | Reg. No. 39,661 |
| Peter J. McAndrews | Reg. No. 38,547 |
| Michael B. Harlin | Reg. No. 43,658 |
| Jonathan R. Sick | Reg. No. 43,920 |
| Krista S. Schwartz | Reg. No. 42,134 |
| Eligio C. Pimentel | Reg. No. 42,076 |
| John F. Nethery | Reg. No. 42,928 |
| Stephen H. Bean | Reg. No. 41,607 |
| Alison L. Pollock | Reg. No. 43,863 |
| James Nuttall | Reg. No. 44,978 |
| James P. Murphy | Reg. No. 40,741 |
| Dean A. Pelletier | Reg. No. 45,007 |
| Joseph M. Barich | Reg. No. 42,291 |
| Tiffany M. Brooks | Reg. No. 44,564 |
| Scott P. McBride | Reg. No. 42,853 |
| Patricia J. McGrath | Reg. No. 44,919 |
| Andrew M. Everest | Reg. No. 44,674 |
| Christopher V. Carani | Reg. No. 44,049 |

the address and telephone number of each of whom is McAndrews, Held & Malloy, Ltd., 500 West Madison Street, 34th Floor, Chicago, Illinois 60606, 312-775-8000, as my attorneys with full power of substitution and revocation to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of first joint inventor ROBERT CAREY

Inventor's signature _____ Date _____

Resident Address _____

Citizenship United States of America

Post Office Address _____

Full name of second joint inventor GREG McINTYRE

Inventor's signature _____ Date _____

Resident Address _____

Citizenship United States of America

Post Office Address _____

002070-12203450